November 25, 2003

Mr. David Peters M.A. Bruder & Sons, Inc. 52<sup>nd</sup> and Gray's Philadelphia, PA 19143

> Re: 167-18020-00016 First Significant Permit Revision to MSOP 167-16915-00016

Dear Mr. Peters:

M.A. Bruder & Sons, Inc. was issued a minor source operating permit on April 2, 2003 for a stationary paint manufacturing operation. A letter requesting a revision to this permit was received on August 22, 2003. Pursuant to the provisions of 326 IAC 2-6.1-6 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

Condition A.1 changes the address from 630 North 3<sup>rd</sup> Street, Terre Haute, Indiana to 108 Canal Street, Terre Haute, Indiana.

Condition D.1.5 of the permit changes the 12-14 inch water drop across the baghouse to a 2-6 inch water drop across the baghouse.

Condition D.1.7(a) has been amended to reflect revised condition language for baghouse failures.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this permit revision which includes this letter, the attached operating conditions applicable to these emission units, and revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Sines, at the Vigo County Air Pollution Control Office, 103 South 3<sup>rd</sup> Street, Terre Haute, Indiana, 47807, or call (812) 462-3343, ext 12.

Sincerely,

Original Signed by George M. Needham George M. Needham Director Vigo County Air Pollution Control

2 Attachments cc: Winter Bottum, IDEM Mindy Hahn, IDEM

### SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT - OFFICE OF AIR QUALITY and VIGO COUNTY AIR POLLUTION CONTROL

#### M.A. Bruder & Sons, Inc. 630 North 3<sup>rd</sup> Street Terre Haute, Indiana 47808

(herein known as the Permittee) is hereby authorized to *construct and* operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 167-16915-00016		
Issued by: George M. Needham, Director Vigo County Air Pollution Control	Issuance Date: April 2, 2003  Expiration Date: April 2, 2008	
First Significant Permit Revision M167-18020	Pages Affected: 4, 18, 19	
Issued by: Original Signed by George M. Needham George M. Needham, Director Vigo County Air Pollution Control	Issuance Date: November 25, 2003	

M.A. Bruder & Sons, Inc. Terre Haute, Indiana Permit Reviewer: Scott Sines

#### First Significant Permit Revision 167-18020-00016

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#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary paint manufacturing operation.

Authorized Individual: David Peters, Engineering Manager

Source Address: 630 North 3<sup>rd</sup> Street 180 Canal Street, Terre Haute, IN Mailing Address: 52<sup>nd</sup> and Gray's, Philadelphia, Pennsylvania 19143

General Source Phone: (812) 234-6621

SIC Code: 2851

County Location: Vigo County

Source Location Status: Maintenance attainment area for Sulfur Dioxide

Attainment area for all other criteria pollutants

Source Status: Minor Source Operating Permit

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) 500 gallon batch line, consisting of a grinder and various tanks.
- (b) 1200 gallon batch line, consisting of a grinder and various tanks.
- (c) 2300 gallon batch line, consisting of a grinder and various tanks.
- (d) Central baghouse, identified as BH-1, for control of the dry ingredients used in the three (3) batch lines.
- (e) Boiler, identified as Boiler A, utilizing natural gas as the primary fuel with #2 fuel oil for backup, with a maximum capacity of 6.30 million BTU per hour, without emission control, exhausting to stack 2.
- (f) Boiler, identified as Boiler B, utilizing natural gas as the primary fuel with #2 fuel oil for backup, with a maximum capacity of 5.30 million BTU per hour, without emission control, exhausting to stack 1.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the paint batch lines, at least once per shift when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 12 to 14 2 to 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and VCAPC, and shall be calibrated at least once every six (6) months.

#### D.1.6 Baghouse Inspections

An inspection shall be performed within the last month of each calendar quarter of all bags controlling the process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.1.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the Vigo County Air Pollution Control Office of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

M.A. Bruder & Sons, Inc. Terre Haute, Indiana Permit Reviewer: Scott Sines

#### First Significant Permit Revision 167-18020-00016

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(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records once per shift of the total static pressure drop during normal operation.
- (c) To document compliance with Condition D.1.6, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

## Indiana Department of Environmental Management Office of Air Quality And Vigo County Air Pollution Control

#### Technical Support Document (TSD) for a Significant Permit Revision to a Minor Source Operating Permit

#### **Source Background and Description**

Source Name: M.A. Bruder & Sons, Inc.

Source Location: 630 North 3<sup>rd</sup> Street, Terre Haute, Indiana 47808

County: Vigo SIC Code: 2851

Operation Permit No.: MSOP 167-16915-00016

Operation Permit Issuance Date: April 2, 2003
Significant Permit Revision No.: 167-18020-00016
Permit Reviewer: Scott Sines

The Vigo County Air Pollution Control (VCAPC) has reviewed a modification application from M.A. Bruder & Sons, Inc. (MAB Paints) relating to the operation of a stationary paint manufacturing operation.

#### History

On August 22, 2003, MAB Paints submitted an application to the Vigo County Air Pollution Control (VCAPC) requesting to change their address to 180 Canal Street, Terre Haute, Indiana and to change the Condition D.1.5 operating pressure drop range to 2 to 6 inches of water at their existing plant. MAB Paints was issued a MSOP permit on April 2, 2003. It must be noted that the address change is due to a Post Office change of address only; the source has not re-located.

#### **Existing Approvals**

The source was issued a MSOP Operating Permit, 167-16915-00016, on April 2, 2003.

#### Enforcement Issue

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

The change of address may be accomplished via an administrative amendment.

The source erred on their initial permit application by requesting a pressure drop of 13 inches of water across the baghouse. The pressure gauge does not read as high as 13 inches, as was verified during the August 12, 2003 Full Compliance Evaluation.

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

Source Name: M.A. Bruder & Sons, Inc.

Terre Haute, Indiana Permit Reviewer: Scott Sines

An application for the purposes of this review was received on August 22, 2003. Additional information was received on September 25, 2003.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	neg
PM-10	neg
SO <sub>2</sub>	neg
VOC	19.90
СО	neg
NO <sub>x</sub>	neg

#### **Actual Emissions**

No previous relevant emission data has been received from the source. All submittals on file predate the plant shutdown.

#### **Justification for Modification**

The Minor Source Operating Permit is being revised through a Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-6.1-6(i)(1) and (2).

#### **County Attainment Status**

The source is located in Vigo County.

Pollutant	Status
P.M10	attainment
SO <sub>2</sub>	maintenance attainment
NO <sub>2</sub>	attainment
Ozone	attainment
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for ozone.
- (b) Vigo County has been classified as attainment or unclassifiable for the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD) 326 IAC 2-2. See the State Rule Applicability for the source section.

Permit Reviewer: Scott Sines

#### **Federal Rule Applicability**

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is located in Vigo County and the potential to emit VOC and SO2 is less than twenty (20) tons per year. The source is not one of the twenty-eight (28) listed sources and its potential to emit PM10 is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

This source is not located in the small portion of Vigo County subject to the lower opacity standard.

#### State Rule Applicability - Individual Facilities

#### 326 IAC 6-1 (Particulate Emission Limitations for Nonattainment Areas)

The source has a P.M. potential to emit of less than one hundred (100) tons per year and actual emissions of less than 10 tons per year, therefore, 326 IAC 6-1-2 does not apply.

#### 326 IAC 6-3-2 (Particulate emission limitations - Process Operations)

The paint production lines are subject to 326 IAC 6-3-2. Since they are controlled by a common baghouse, the emission limitation should be calculated from the combined process weight rate. The emission rate limitation is calculated by the equation:  $E = 4.10^{\circ}P^{0.67}$  with: E = E emission rate limit in pounds per hour, and P = E process weight rate.

#### 326 IAC 8-1-6 (General New Source Reduction Requirements)

This operation is not subject to 326 IAC 8-1-6 because it does not have the potential to emit 25 tons of VOC per year.

#### **Compliance Requirements**

The compliance monitoring requirements applicable to this source are as follows:

1. The baghouse has applicable compliance monitoring conditions as specified below:

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Source Name: M.A. Bruder & Sons, Inc.

Terre Haute, Indiana Permit Reviewer: Scott Sines

> (a) Daily visible emissions notations of the baghouse exhaust stack shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

> (b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the paint batch lines, at least once per shift when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 to 6 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and VCAPC, and shall be calibrated at least once every six (6) months.

- (c) An inspection shall be performed within the last month of each calendar quarter of all bags controlling the process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (d) In the event that bag failure has been observed:
  - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced.

    Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag

Source Name: M.A. Bruder & Sons, Inc.

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failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the Vigo County Air Pollution Control Office of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(2) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse used for particulate control must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations).

#### Conclusion

The operation of this stationary paint manufacturing operation shall be subject to the conditions of the attached proposed MSOP Permit No. MSOP 167-16915-00016.